The Effect of Entrepreneurship Education and E-Commerce on Entrepreneurial Intention Through Adversity Quotient in Students of The Faculty of Economics and Business, Universitas Negeri Malang

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ABSTRACT
This study examined how entrepreneurship education and e-commerce affected students at the Universitas Negeri Malang's Faculty of Economics' ability to overcome adversity. The population in this study comprises Universitas Negeri Malang students who have taken entrepreneurial courses and are studied using a descriptive quantitative methodology. Up to 125 students who have attended entrepreneurship courses were sampled using the accidental sampling methodology and a Likert scale questionnaire as the data collection tool. Data analysis methods using Smart PIs 3.0, including path coefficients, validity, and reliability tests. The findings showed that entrepreneurship education had a favorable and significant impact on entrepreneurial intention. E-commerce has no appreciable effects on entrepreneurial intent. The adversity quotient is significantly impacted by entrepreneurship education. E-commerce has a significant effect on the adversity quotient. Additionally, entrepreneurship education has a favorable and significant impact on entrepreneurial intention through the adversity quotient, and e-commerce significantly impacts entrepreneurial intention through the adversity quotient.

Keywords: entrepreneur, e-commerce, adversity quotient

1. INTRODUCTION
By 5.86% or as many as 8.41 million people during August 2022, the open unemployment rate (TPT) is in data from the Central Statistics Agency (BPS). The majority of the working-age population—143.72 million people—are working; the remaining 65.70 million are unemployed. Unemployment is a classic problem not properly resolved until the current Industry 4.0 era. Due to the ASEAN Economic Community competition, Indonesian university graduates will compete directly with graduates from other countries. College graduates should not only focus on finding work but also want to open their businesses and encourage the entrepreneurial spirit of their students.

The lack of entrepreneurial intention after graduating from university is feared that the unemployment rate will continue to increase. Many human resources are available. Higher education graduates prefer jobs in public and commercial organizations rather than entrepreneurship (Butar, 2022). Universities have provided entrepreneurship education courses to their students so that they have the experience of collaborating and optimizing the competencies needed in the world of work. (Putro, 2022). According to Ratten (2020), Entrepreneurship education is essential for the government to encourage economic growth. Entrepreneurship education is critical to helping increase entrepreneurial activity (Bischoff et al., 2018).

Information technology provides fast, perfect, and comprehensive information to facilitate transactions. The recent development of information technology has substantially helped the entrepreneur's commercial journey. The fastest-growing domain of information technology is buying, selling, distributing, and marketing goods and services via the Internet, television, or computer networks (e-commerce). Given the emergence
of information and communication technology and the growth of ubiquitous smartphone applications, e-commerce is no longer confined to cities and is becoming a key driver of sustainable economic development (Chao, 2021).

A strong desire and passion for starting a business is a prerequisite for becoming an entrepreneur. This attraction is not something you are born with; instead, it develops due to their motivations and the things that influence them. Ningsih (2020) emphasized that a student who can turn challenges into opportunities will not hesitate when starting a business to meet challenges because they believe the challenges or challenges they face are opportunities for success. According to one hypothesis, a person needs to have a high adversity quotient, or resilience to adversity, to develop a strong interest in entrepreneurship. Someone has a high level of adversity quotient if they can overcome challenges in their life and turn them into opportunities (Tambunan, 2020).

The urgency of this research is that there is currently a visible lack of student interest in entrepreneurship. Higher education graduates only prefer to look for work, not to open a business or be self-employed. The availability of the Internet and the many E-commerce that have been created make it easier for many people to become entrepreneurs and, of course, with the provision of entrepreneurship education that has been studied. The novelty of this study is that very few previous studies still discuss the entrepreneurial intention variable through the adversity quotient mediating variable. The adversity quotient is necessary for a student to become an entrepreneur. This research has the object of students of the Faculty of Economics and Business, Universitas Negeri Malang.

2. REVIEW OF LITERATURE

Entrepreneurial Intention

According to Hedrawan and Sirine (2017), interest in entrepreneurship is a desire from within a person with a brave soul to create a business to be successful for a better life. Interest in entrepreneurship can be based on an attitude towards starting a new company with an interest in making someone more active when looking for and taking advantage of business opportunities in optimizing potential (Mardia, 2021). Meanwhile, Hasan (2022) argues that an interest in entrepreneurship is a desire and willingness to work fast or someone who tries to make ends meet without fear of failure.

In this study, what is meant by an interest in entrepreneurship is the desire to start a business with a courageous, enterprising spirit and the ability to see and take advantage of business opportunities to live a better life without fear of failure. According to Novitasari et al. (2017), the following can affect interest in entrepreneurship entrepreneurial desire, thinking creatively, date to take risks, and the spirit of leadership.

Entrepreneurship Education

According to Ratten (2020), Entrepreneurship Education is one of the fastest-growing fields of study in the world with increasing interest because it links current business practices with academic theory. According to Wardana (2020), Entrepreneurship Education is like a discipline that is studied and developed where activities that discuss and learn about entrepreneurship are published with the advancement of knowledge, skills, attitudes, and characters that support success. Based on some of the explanations above, it can be interpreted that Entrepreneurship Education is an effort to provide business insight by developing skills, potential, creativity, and innovation to overcome problems and opportunities for success. Entrepreneurship Education aims to increase the ability to act creatively and innovatively, to be able to seize opportunities, create value and be optimally intellectual. The benefits of entrepreneurship are divided into three groups: help for students, small and medium enterprises, and universities.

E-commerce

E-commerce is a form of selling goods and services that uses computers and the Internet to select goods, order and calculate them through electronic payments and documents. Individuals and organizations can buy goods or order services (Akimov et al., 2021). According to Yadav & Zillur (2017), the indicators used are interactive, informative, and personalization.

Adversity Quotient

An adversity quotient is a form of intelligence endurance that is the background for a person's success in facing challenges when experiencing difficulties or failures (Aprilia, 2019). The adversity quotient is part of a person's ability to overcome various life problems and one's ability to survive. To find out a person's immune system, it can be seen to what extent they can overcome life's problems, no matter how difficult, without giving up. Wang et al.’s research (2021) explained that four basic dimensions would produce a high adversity quotient ability, namely Control, Origin, Ownership (O2), Reach, and Endurance (E), as for the relationship between the variables contained in this study.

H1 Relationship between Entrepreneurship Education and Adversity Quotient
H2 Relationship between E-Commerce and Adversity Quotient
H3 Relationship between Adversity Quotient and Entrepreneurial Intention
H4 Relationship between Entrepreneurship Education and Entrepreneurial Intentions
H5 Relationship between E-commerce and Entrepreneurial Intention
H6 Relationship between Entrepreneurship Education and Entrepreneurial Intentions through Adversity Quotient
H7 Relationship of E-Commerce to Entrepreneurial Intention through Adversity Quotient

The following is an overview of the conceptual framework of construction between variables

3. METHOD

Quantitative descriptive research is the methodology used in this study. A research technique that seeks to clarify the relationship between the variables under consideration and their relative positions. This research was conducted at the Faculty of Economics, Universitas Negeri Malang. As many as 1,531 students of the Faculty of Economics, Universitas Negeri Malang, became the population in this study—a sampling of 125 students who have completed entrepreneurship courses.

Accidental sampling and non-probability sampling techniques were used. The research instrument uses a questionnaire or questionnaire in the media Google form. Smart PLS 3.0 Data analysis techniques are used because they are more flexible in research that links theory and data and can carry out path analysis of latent variables. The following is the research instrument grid for each variable:

Table 1. Research Instrument

<table>
<thead>
<tr>
<th>Variable</th>
<th>Indicator</th>
<th>Statement items</th>
<th>Number item</th>
</tr>
</thead>
<tbody>
<tr>
<td>Independent variable</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Entrepreneurship education (X1) Hutagalung (2019)</td>
<td>Curriculum</td>
<td><em>Entrepreneurship education provides knowledge and insight into the business world</em></td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td><em>Entrepreneurship learning has fostered a desire to be self-employed</em></td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td><em>Availability of facilities and infrastructure that support the entrepreneurial spirit.</em></td>
<td>3</td>
</tr>
<tr>
<td>E-commerce (X2) Yadav &amp; Rahman (2017)</td>
<td>Interactive</td>
<td><em>E-commerce makes it possible to share and update existing content</em></td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td><em>E-commerce regularly interacts with followers</em></td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Informative</td>
<td><em>Information provided by e-commerce is complete</em></td>
<td>6</td>
</tr>
<tr>
<td></td>
<td></td>
<td><em>Facilitate payment transactions</em></td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>Personalization</td>
<td><em>The existence of e-commerce makes needs fulfilled</em></td>
<td>8</td>
</tr>
<tr>
<td></td>
<td></td>
<td><em>Easily influenced by things or information about an e-commerce product</em></td>
<td>9</td>
</tr>
<tr>
<td>Intervening</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adversity quotient (Z) Wang et al. (2021)</td>
<td>Control</td>
<td><em>Can condition yourself in difficult situations</em></td>
<td>10</td>
</tr>
<tr>
<td></td>
<td></td>
<td><em>Confidence can solve problems</em></td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>Origin and Ownership</td>
<td><em>The source of the problem</em></td>
<td>12</td>
</tr>
<tr>
<td></td>
<td></td>
<td><em>Acknowledgment of the cause of the problem</em></td>
<td>13</td>
</tr>
</tbody>
</table>
4. RESULTS AND DISCUSSION

Based on the results of distributing the questionnaires, there were 125 respondents, namely students of the Faculty of Economics, Universitas Negeri Malang, with the criteria of having taken entrepreneurship courses which were divided into several characteristics, namely based on the gender of the respondents there were 80% who were born as respondents were women. Based on the study program, most, or 36%, came from the commerce education study program. Based on the class, most respondents, or 50%, came from the 2019 class.

Each indication’s loading factor (convergent validity) is described holistically with a validity test. It can be said that the value of the loading factor > 0.7 is valid. Nonetheless, it is permissible to say that a loading factor of 0.50 to 0.60 converges validity requirements.

This indicator can be declared valid or accepted because it has a value more excellent (>70) for the adversity quotient indicator (Z) and the loading factor for the entrepreneurship education indicator (X1). Using a loading factor greater than 0.60, the e-commerce (X2) and entrepreneurial intention (Y) indicators can be sufficient to meet convergent validity. In the validity test, there were three invalid question items in the e-commerce variable instrument, so the researcher deleted the question items to continue the research. The following table shows the loading factor and cronbach alpha processing results through the Smart PLS application.

While the reliability test using Composite Reliability measures the actual construction's reliability level. For explanatory research, the average variance extract (AVE) > 0.5, Cronbach's alpha > 0.60, and 0.60 to 0.70 composite reliability values are still acceptable (Ghozali, 2021). Table 2 shows that reliability testing has been carried out using SmartPLS 3.0 and is shown as follows.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Indicator</th>
<th>Statement items</th>
<th>Number item</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Reach</td>
<td>• Not protected in a problem</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>Endurance</td>
<td>• Have the ability to survive in the face of difficult situations • Have a positive response to problems that come</td>
<td>15, 16</td>
</tr>
<tr>
<td>Dependent Variable</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Entrepreneurial intention (Y) Novitasyari (2017)</td>
<td>Entrepreneurial Desire</td>
<td>• Growing the desire for entrepreneurship • Develop and realize entrepreneurial desires</td>
<td>17, 18</td>
</tr>
<tr>
<td></td>
<td>Creative Thinking</td>
<td>• Able to compete with other entrepreneurs • Ability possessed in entrepreneurship</td>
<td>19, 20</td>
</tr>
<tr>
<td></td>
<td>Dare to take risks</td>
<td>• Not easy to give up when experiencing failure • Believing that entrepreneurs must be willing to take risks</td>
<td>21, 22</td>
</tr>
<tr>
<td></td>
<td>Spirit of Leadership</td>
<td>• Make decisions fairly • Responsible for the decisions taken • Firm in making decisions</td>
<td>23, 24, 25</td>
</tr>
</tbody>
</table>

| Variable | AVE (>|0.5) | Composite Reliability (0.60->0.70) | Cronbach Alpha (>0.60) | Keterangan |
|----------|-------------|------------------------------------|------------------------|------------|
| Education| 0.592       | 0.812                              | 0.655                  | Reliable   |
| E-commerce| 0.507       | 0.860                              | 0.808                  | Reliable   |
| Adversity| 0.550       | 0.895                              | 0.862                  | Reliable   |
| Entrepreneurial Intention| 0.596       | 0.930                              | 0.915                  | Reliable   |
The composite reliability value of the reliable test listed above has met $> 0.7$ as a requirement for composite reliability, so it can be interpreted that the variables entrepreneurship education, e-commerce, adversity quotient, and entrepreneurial intention have high reliability. The reliability test conducted on question items that are considered valid is shown in Table 2. A variable is deemed reliable if it regularly produces the same results when examined. These results are based on the reliability score of the instrument, which is 0.655 for the entrepreneurship education instrument, 0.808 for the e-commerce instrument, 0.862 for the adversity quotient instrument, and 0.915 for the entrepreneurial intention instrument. Each of the four abovementioned instruments bears a Cronbach alpha value greater than 0.6, is considered reliable, or meets the standard.

Table 3. Value of R-Square

<table>
<thead>
<tr>
<th>Variable</th>
<th>R Square</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adversity quotient (Z)</td>
<td>0.310</td>
</tr>
<tr>
<td>Entrepreneurial Intention (Y)</td>
<td>0.705</td>
</tr>
</tbody>
</table>

The coefficient of determination of the advertised quotient (Z) variable is 0.310, according to the table above. The $R^2$ value of the adversity quotient (Z) variable is 0.310, indicating that the entrepreneurship education variable (X1) influences 31% of the population. Meanwhile, other factors not related to the research had an impact on the remaining 69%. The $R^2$ value of the entrepreneurial intention variable is 0.705. This indicates that it can be influenced by the variables entrepreneurship education (X1), e-commerce (X2), and adversity quotient (Z), which have an $R^2$ value of 70.05% and 29.95 respectively, and other factors influence the remaining %. The better the structural equation, the higher the value of $R^2$, and the greater the possibility that variable X can affect variable Y.

5. HYPOTHESIS

The results of direct and indirect testing, including output R-square, parameter coefficients, and t-statistics, hypotheses were tested. They considered the correlation between constructs, t-statistics, and p-values. To decide whether a hypothesis can be accepted or not.

Table 4. hypothesis

<table>
<thead>
<tr>
<th>Variable</th>
<th>Output</th>
<th>Sample Mean (M)</th>
<th>Standard Deviation (STDEV)</th>
<th>$t$ Value</th>
<th>$p$ Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>X1 - Z</td>
<td>0.219</td>
<td>0.362</td>
<td>0.096</td>
<td>3.011</td>
<td>0.003</td>
</tr>
<tr>
<td>X2 - Z</td>
<td>0.159</td>
<td>0.362</td>
<td>0.093</td>
<td>3.881</td>
<td>0.000</td>
</tr>
<tr>
<td>Z - Y</td>
<td>0.630</td>
<td>0.630</td>
<td>0.054</td>
<td>11.742</td>
<td>0.000</td>
</tr>
<tr>
<td>X1 - Y</td>
<td>0.274</td>
<td>0.276</td>
<td>0.057</td>
<td>4.766</td>
<td>0.000</td>
</tr>
<tr>
<td>X2 - Y</td>
<td>0.079</td>
<td>0.076</td>
<td>0.061</td>
<td>1.298</td>
<td>0.195</td>
</tr>
<tr>
<td>X1 - Z - Y</td>
<td>0.182</td>
<td>0.189</td>
<td>0.059</td>
<td>3.184</td>
<td>0.002</td>
</tr>
<tr>
<td>X2 - Z - Y</td>
<td>0.126</td>
<td>0.229</td>
<td>0.064</td>
<td>3.518</td>
<td>0.000</td>
</tr>
</tbody>
</table>

H1: Entrepreneurship education (X1) has a significant effect on adversity quotient (Y)

The results are consistent with research conducted by Dewi (2022), which revealed the possibility of a relationship between Entrepreneurship education. Entrepreneurship education will follow an entrepreneur's attitude, behavior, and mindset. With a good understanding of Entrepreneurship education, a person can think, manage, and direct action. In this case, it will also affect a person's ability to overcome life's difficulties and learn to take advantage of opportunities by facing various risks.

H2: E-commerce (X2) has an effect on Adversity quotient (Z)

The results are consistent with research conducted by Dewi (2022), in her study confirming that adversity intelligence has an impact on how intensely entrepreneurial students produce valuable and significant results. When entrepreneurial intentions increase, the use of E-commerce also increases. So that there is a link between E-commerce and adversity quotient

H3: Adversity quotient (Z) affects Entrepreneurial Intention (Y)

The results are consistent with research conducted by Gultom (2021) that the adversity quotient significantly affects entrepreneurial intention. This finding corroborates previous research, which found that increasing the adversity quotient would increase student interest in entrepreneurship. The entrepreneurial intention of students increases with the level of adversity quotient, and the relationship between adversity intelligence and entrepreneurial sense is quite significant.

H4: Entrepreneurship education (X1) has a significant effect on Entrepreneurial Intention (Y)

This finding is in line with Gultom's research (2021), which found a substantial relationship between the variables of entrepreneurship education and entrepreneurial intentions. In addition, Veronika's
research (2021) shows that entrepreneurship education has a positive and significant impact on entrepreneurial tendencies.

**H5: E-commerce (X2) has no significant effect on Entrepreneurial Intention (Y)**

This research contrasts with previous research by Sari and Rahayu (2020), which concluded that e-commerce affects the entrepreneurial intention of the YAI Jakarta Faculty of Economics and Business for Entrepreneurship. Based on the hypothesis that has been processed, e-commerce has no significant effect on the intention of students of the Faculty of Economics and Business, Universitas Negeri Malang, to start their own business. This is evident from e-commerce which is only used occasionally to view materials or trends without increasing consumer enthusiasm for entrepreneurship.

**H6: Entrepreneurship education (X1) has a significant effect on Entrepreneurial Intention (Y), which is mediated by the Adversity quotient (Z)**

This finding aligns with Simatupang's research (2020) that entrepreneurship education significantly and positively affects entrepreneurial intention, with the adversity quotient variable as a mediator. The ability to be resilient in the face of failure experienced students in entrepreneurship, which fuels enthusiasm in the field.

**H7: E-commerce (X2) has a significant effect on Entrepreneurial Intention (Y), which is mediated by the Adversity quotient (Z)**

This finding is in line with Yadewani's research (2017), which found that e-commerce had a beneficial and significant impact on the plans of students at AMIK Jayanusa to start their businesses. Students at AMIK Jayanusa feel increased pressure to complete all assignments related to e-commerce and master entrepreneurship courses. Veronika (2021) emphasized that as e-commerce grows, the number of entrepreneurs will also increase. In addition, e-commerce and entrepreneurship education significantly influence student entrepreneurial tendencies if one has no prior experience with e-commerce.

**CONCLUSION**

This study shows that (1) entrepreneurship education can increase the adversity quotient of students of the Faculty of Economics and Business, Universitas Negeri Malang. With extensive knowledge about entrepreneurship, a person is likely to have the ability to overcome difficulties or obstacles. (2) e-commerce can increase the adversity quotient of students of the Faculty of Economics and Business, Universitas Negeri Malang. Someone with extensive knowledge in the use of e-commerce can increase the adversity quotient. (3) Adversity quotient can increase the entrepreneurial intention of students of the Faculty of Economics and Business, Universitas Negeri Malang. Someone with a high adversity quotient may be more imaginative, independent, hardworking, optimistic, willing to take risks and responsible. (4) entrepreneurship education can increase the entrepreneurial intention of the Faculty of Economics and Business, Universitas Negeri Malang students. (5) e-commerce has no effect on entrepreneurial intention in students of the Faculty of Economics and Business, Universitas Negeri Malang. (6) entrepreneurship education can increase entrepreneurial intention through the adversity quotient of students of the Faculty of Economics and Business, Universitas Negeri Malang. The better the knowledge about entrepreneurship, the higher the interest in entrepreneurship by having resilience in dealing with a problem or failure. (7) e-commerce influences entrepreneurial intention through adversity quotient in Faculty of Economics and Business, Universitas Negeri Malang students. The higher the e-commerce use, the less it will affect entrepreneurial intention without going through the adversity quotient.

Because this study only looked at two independent variables, further research must be able to find independent variables that were not considered in this study. It is hoped that further research will expand all faculties at Universitas Negeri Malang and each faculty will have the same number of respondents, using different research methodologies and data processing methods, so that more recent research findings are obtained.

**REFERENCE**


